Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

recipient of red cell unit tested for COVID-19 PCR and all were non-reactive. None of the recipients developed any COVID-19 related symptoms post-transfusion

Conclusion: None of the recipients of donor diagnosed with COVID-19 following donation developed COVID-19 related symptoms or tested positive for COVID-19 PCR and remaining blood products were also negative for COVID-19 PCR in this asymptomatic blood donor. Continuous data collection is needed to conclude the possibility of COVID-19 transmission through blood transfusion.

PCO-013

Vaccine-associated disease enhancement: a case report of post-vaccination COVID-19

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Introduction: The COVID-19 pandemic has entered a new phase with the roll-out of several vaccines worldwide at an accelerated phase. Currently, little is known about the potential of vaccine associated disease enhancement (VADE) following COVID-19 immunization.

Case Illustration: We herewith report two patients admitted with confirmed COVID-19 pneumonia with a history of CoronaVac vaccination. The first patient with a relatively milder course of the disease had received two doses of CoronaVac whereas the second patient with a more progressive course of the disease received only one dose before developing symptoms and being admitted to the hospital. Our observations suggest that vaccination could act in boosting the inflammatory process and reveal the previously asymptomatic COVID-19 illness. Theoretically, vaccines could induce VADE, where only suboptimal, non-protective, titers of neutralizing antibodies were produced or pro-inflammatory T helper type 2 response were induced. Secondly, enhanced respiratory disease (ERD) could manifest, where paradoxically, pulmonary symptoms are more severe due to peribronchial monocytic and eosinophilic infiltration can happen during infection after vaccination or previous infection.

Conclusion: We report two cases of patients developing COVID-19 shortly after vaccination with CoronaVac in which VADE is likely. We recommend that current vaccination strategies consider measurement of neutralizing antibody titer as a guide in ensuring the safest strategy for mass immunization. Studies are needed to investigate the true incidence of VADE on vaccinated individuals and on how to differentiate between severe disease unrelated to vaccination and VADE.

PCO-014

Parenteral and oral anticoagulant treatment for hospitalized and post-discharge patients with COVID-19: A systematic review

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Introduction: Coagulation abnormalities are key features of COVID-19 patients and anticoagulants has been endorsed by different thrombosis and hematological societies. Regardless of the recommendations above, evidence on the benefit and risk of both prophylactic and treatment dose anticoagulants in COVID-19 patients are lacking. This study aims to investigate the literature on oral and parenteral anticoagulants treatment for hospitalized and post-discharge patients with COVID-19.

Methods: Systematic search and handsearching was conducted between 22 November and 9 December 2020 in the following databases: Cochrane, EBSCO, Pubmed, and EMBASE. The inclusion criteria are human study, aged 18 years or older, full-text, English, randomized control trial, meta-analysis, systematic review, and observational study.

Results: The search yield 18 studies on in-hospital anticoagulant use and 2 studies with prior anticoagulant use. Four studies were eligible for quantitative analysis. Three case series were on drugs with anticoagulation effects were eligible for appraisal. None of studies are clinical trial. All studies included were high quality studies based on the Newcastle Ottawa Scale.

Discussion: In the absence of clinical trial results, early findings from the studies in this systematic review demonstrate the benefit of anticoagulation in COVID-19 patients, especially in the setting of increased VTE in patients with severe disease. Surprisingly, to date we found no published studies reporting the use of anticoagulants in COVID-19 patients post-discharge.

Keywords: COVID-19, anticoagulant, VTE, thromboprophylaxis.

PCO-015

Human airway epithelial Calu-3 cells as the potential platform to study the pathophysiology of SARS-CoV-2 isolated in Malaysia

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Background: Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has been identified as the etiologic agent for the Coronavirus Disease 2019 (COVID-19) outbreak that started in early December 2019. To date, COVID-19 has caused almost 6000 deaths in Malaysia since its first outbreak in January 2020.

Objective: Understanding the pathophysiology of the virus is important for the researchers to identify the potential targets against COVID-19. For this purpose, the virus must be isolated and propagated in a suitable host that allows the virus to grow well and at the same time would not cause immediate cell death to the host.

Method: In the effort to identify the best host cells for the propagation of SARS-CoV-2, we infected several mammalian cells lines (i.e., Vero, Vero E6, Calu-3, MRC-5, and A549) with different lineages of SARS-CoV-2 that are widely circulated in Malaysia.

Results: We found that SARS-CoV-2 multiplied only in Vero, Vero E6 and Calu-3 cells. Propagation of the virus in these cell lines were